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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/615,939

07/10/2003

Mikio Kondoh

240031US0

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07/18/2007

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.

1940 DUKE STREET

ALEXANDRIA, VA 22314

EXAMINER

KESSLER, CHRISTOPHER S

ART UNIT

PAPER NUMBER

1742

NOTIFICATION DATE

DELIVERY MODE

07/18/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/615,939	Applicant(s) KONDOH ET AL.	
	Examiner Christopher Kessler	Art Unit 1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 4, 6-17, 19-23, 25, 26 and 36-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4, 6-17, 19-23, 25, 26, and 36-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Responsive to the amendment of 20 April 2007, claims 14-16 have been amended, and no new matter is added. Claims 1, 3, 4, 6-17, 19-23, 25, 26, and 36-38 are currently under examination.

Status of Previous Rejections

2. The amendment to claims 14-16 are sufficient to overcome the objections. Applicant has changed the scope of dependent claim 16. The previous rejections based on the prior art are maintained.

Claim Rejections - 35 USC § 102

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1, 7, 19, 22, 26, 29, 37, and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by JP '901.

JP '901 is applied to the claims as stated in a prior Office Action.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP '901.

JP '901 is applied to the claim as stated in a prior Office Action.

7. Claims 14, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP '901 as applied to claim 1 above, and further in view of Kondo '760.

Regarding claims 14 and 17, JP '901 and Kondo '760 are applied to the claims as stated in a prior Office Action.

Regarding claim 16, JP '901 is applied to the claim as stated in the rejection of claim 1 in a prior Office Action. JP '901 does not teach wherein the ejection pressure is 5 MPa or less when the compacting pressure is 392 MPa or more.

Kondo '760 teaches a process for compacting a green compact comprising spraying a powdery higher fatty acid-based lubricant which is dispersed in a dispersion comprising a surfactant onto an inner surface of a die, which is heated (see claim 1, and figure 1, for example); filling a raw material powder whose major component is an active metallic element into the die (see claim 1); compacting the raw material powder by warm pressurizing to make a green compact (see claim 1); and ejecting the green compact from the die (see abstract, for example); whereby the resulting green compact has a high density (see abstract).

Kondo '760 teaches that ejection pressure is 10 MPa or less when the compacting pressure is 784 MPa or more (see figure 4). Kondo '760 further teaches that the ratio of ejecting pressure with respect to compacting pressure shows a decreasing trend with increasing compacting pressure (see col. 20, lines 15-53, for example).

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It would have been obvious to one of ordinary skill in the art to use 392 MPa compacting pressure or more as taught by Kondo '760 in the process of JP '901, in order to improve density in the green compact and decrease the ejection force, as taught by Kondo '760 (cited above). The properties not disclosed in the prior art of ejecting pressure being less than 5 MPa would be inherent in the process (see MPEP§2112.01).

8. Claims 3, 6, 10, 11, 13, 17 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP '901 in view of Kobayashi.

JP '901 and Kobayashi are applied to the claims as stated in a prior Office Action.

9. Claims 1, 3, 4, 6, 7, 17, 19, 29, 37, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP '206 in view of JP '901.

JP '901 and JP '206 are applied to the claims as stated in a prior Office Action.

10. Claims 1, 3, 4, 6, 7, 8, 9, 11, 12, 14, 15, 17, 19, 21, 23, 25, 29, 37, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo '760, in view of Furuta.

Kondo '760 and Furuta are applied to the claims as stated in a prior Office Action.

Response to Arguments

11. Applicant has stated in the Remarks of 20 April 2007, at pages 12-13,

The Examiner has recognized that JP '901 does not disclose that "in the compacting step, a new metallic soap film different from the higher fatty acid-based lubricant and comprising the active metallic element is formed on a surface of the green compact". Thus, the present invention cannot be anticipated. The Examiner has however taken the position that the formation of the new metallic soap also inherently occurs in the process of JP '901. Applicants disagree as explained below.

This statement is incorrect. "[T]he discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer." *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus, properties not disclosed by the prior art do not preclude anticipation of an invention. Applicant is again further directed to MPEP 2112.01.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the surfactant being different from the lubricant) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

While Applicant has provided evidence that the prior art in general does not teach applicant's invention, there is no substantive evidence presented that the high pressures used in the process of JP '901 along with the zinc stearate lubricant would not result in formation of a metallic soap film comprising the active metallic element on

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the surface of the green compact. While the prior art in general teaches away from use of high pressures such as those claimed in instant claim 13, JP '901 as cited anticipates the invention as claimed in claim 1, and JP '901 in view of Kondo '760 makes obvious the characteristics of ejection force.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a uniform lubricant film being formed on the die) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). JP '901 teaches heating and coating a higher fatty-acid based lubricant on the die, and it would be obvious the coating would be uniform, as stated in the rejection.

Applicant has stated in the Remarks of 20 April 2007, at page 16, "Even if a metal soap is generated in JP '901, the level of this is quite different from that of a metal soap film which is disclosed in the present invention." The level of the film formed is not claimed in the instant claims. If *any* soap film is formed comprising the active metal element in the invention of JP '901, it would be sufficient to anticipate the claim limitation of "a new metallic soap film being different from the higher fatty acid-based lubricant and comprising the active metallic element" in claim 1, for example. Applicant is directed to MPEP 2111.

In response to applicant's argument that Kondo '760 is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or,

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if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both documents deal with compaction processes in the field of powder metallurgy, and thus both are in the same field of applicant's endeavor. Also, both JP '901 and Kondo '760 share the international classification of B 22 F 3/02, and thus appear in searches for international documents in that class.

In regard to the expectation for success, Kondo '760 teaches using the same type of equipment, the same type of dies, and the same kind of lubricant taught by JP '901. It is known in the art that the same general processes used to compact iron powders are used for aluminum or titanium. It would be expected that the same general phenomena that apply to compaction of iron powders also apply for aluminum or titanium.

In response to applicant's argument that the combination of JP '206 and JP '901 do not teach properties in the instant claims, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). In this case, JP '206 and JP '901 are applied to the claims as stated, and the combination of teachings renders the invention obvious.

In regard to the expectation for success, Kondo '760 teaches using the same type of equipment and dies taught by Furuta. It is known in the art that the same

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general processes used to compact iron powders are used for aluminum or titanium. It would be expected that the same general phenomena that apply to compaction of iron powders also apply for aluminum or titanium.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Kessler whose telephone number is (571) 272-6510. The examiner can normally be reached on Mon-Fri, 9-5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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